

In the Drawings

Figures 1, 2A, 2E, 3, 4, and 5 are replaced to indicate that they are "Prior Art."

Figure 3 is replaced to indicate the article of wood as reference number 8 (changed from reference number 11).

Figure 4 is replaced to indicate the edge of the deflector ridge as reference number 9 (changed from reference number 8).

REMARKS

Applicant thanks the Examiner for the telephone discussion of the case. Independent claims 1 and 29 are amended as the Examiner requested to make express the wedging action inherent in the structure recited in the original claims. The wedging action provides the outstanding advantage of increased stability of the knife against swiveling or rotation under the extreme forces experienced as the knife impacts the article of wood that is being cut. Wedging provides a mechanical advantage that enhances the clamping force exerted on the knife by the components of the knife assembly. Furthermore, the wedging action further serves to ensure that a moderate degree of wear of the load-bearing surfaces will not require replacement of the knife, the clamping member, or both, as the outer clamping member on additional tightening continues to provide wedging action and thus firmly hold the knife in the assembly, until the wear of the parts is so great that no more wedging takes place. This is a distinct advantage over the corresponding clamping member / knife configuration of Biller, wherein there is a matched fit between the two parts that wear can only serve to loosen and which provides less effective means to tighten the clamping action, thus failing to provide a means for "taking up the slack" that results from wear in the contact between the knife and the clamping member. This is a distinct advantage in that the expensive knife and knife assembly components need not be replaced so frequently.

The limitations of independent claim 18 are herein incorporated into claim 20 (previously dependent on claim 18), and claim 18 is cancelled. In the Swartwood reference, there is no disclosure of a defined gap between the inside of a deflector ridge and the surface of the counterknife that supports the knife between the two deflector ridges. Biller does not disclose deflector ridges at all. This defined gap feature (see Figure 8, gap "g2"), as pointed out in the specification (page 15, paragraph 2), serves to ensure that the load exerted on the knife by the outer clamping member is borne by the counterknife's control surfaces (and not by the outer tip of the counterknife), the gap being small enough to avoid significant loading of wood chip material in the gap.

The amendments to the background and specification are minor changes that introduce no new matter but do clarify the subject matter of the invention, for example, substituting the unambiguous term "front side" for what was previously called the "bottom surface" of the knife, a term that is less clear. Also, corrections are made to misstated reference numbers.

The drawings are amended herein to meet the Examiner's requirements, correcting misstated reference numbers and indicating prior art figures as "Prior Art."

The Applicant respectfully requests that the amendments and arguments herein be considered by the Examiner and the patent properly be allowed.

Thank you very much.

Sincerely,

A handwritten signature in black ink, appearing to read "Geoffrey K. Cooper", with a long horizontal flourish extending to the right.

Geoffrey K. Cooper
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